

that Committee, recommending the adoption, by the Society, of the following resolutions :

*Resolved*, That a Committee be appointed to superintend the arrangement of the Franklin Manuscript Papers, in chronological order, with a view to their convenient binding in volumes; with power to engage the services of a person to perform the labour of arranging the papers and preparing a general index to the volumes.

*Resolved*, That a sum, not exceeding two hundred and fifty dollars, be appropriated to defray the expenses of arranging the papers, preparing the index, and binding the volumes.

Which resolutions were considered and adopted, and, under the first resolution, a Committee was appointed, consisting of Dr. Franklin Bache, Mr. Ord and Mr. Justice.

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*Stated Meeting, December 21.*

Present, eleven members.

Dr. PATTERSON, President, in the Chair.

Letters were read:—

From Dr. J. Hughes Bennett, dated Edinburg, 15th Nov. 1849:—

From Dr. Leidy, dated Philadelphia, 12th December, 1849; both acknowledging the receipt of notice of their election as members of this Society:—

From the Royal Society of London, dated Somerset House, August, 1849, acknowledging the receipt of Vol. X. of the Transactions, and Nos. 36 to 40, inclusive, of the Proceedings of this Society: and,—

From the Historical Society of New Jersey, dated Newark, N. J., 30th November, 1849, announcing the transmission of a donation to this Society.

The following donations were announced:—

FOR THE LIBRARY.

Mémoires de l'Académie Royale des Sciences, des Lettres, et des Beaux Arts de Belgique. Tomes XXI. et XXII. Bruxelles, 1848. 4to.—*From the Royal Belgian Academy of Sciences, &c.*

- Mémoires Couronnés et Mémoires des Savants Etrangers: Publiés par l'Académie Royale des Sciences, des Lettres, et des Beaux Arts de Belgique. Tome XXI. 1846-7. Bruxelles, 1848. 4to.—*From the same.*
- Bulletins de l'Académie Royale des Sciences, &c. de Belgique. Tome XIV. 2ème Partie, 1847; et Tome XV. 1ère Partie, 1848. Bruxelles. 8vo.—*From the same.*
- Annuaire de l'Académie Royale des Sciences, &c. de Belgique: 14ème Année. Bruxelles, 1848. 12mo.—*From the same.*
- Annales de l'Observatoire Royale de Bruxelles: Publiées aux frais de l'Etat, par le Directeur A. Quetelet. Tome VI. Bruxelles, 1848. 4to.—*From the same.*
- Annuaire de l'Observatoire Royale de Bruxelles. Par A. Quetelet, Directeur de l'Etablissement. 1848. 15ème Année. Bruxelles. 12mo.—*From the same.*
- Catalogue des Livres de la Bibliothèque de l'Observatoire Royale de Bruxelles. Bruxelles, 1847. 8vo.—*From the same.*
- Rapport adressé à M. le Ministre de l'Intérieur, sur l'état et les travaux de l'Observatoire Royale pendant l'année 1847. Par M. le Directeur A. Quetelet. Bruxelles, 1847. 8vo.—*From the Author.*
- Observations des Phénomènes Periodiques. (Extrait du Tome XXI. des Mémoires de l'Académie Royale de Belgique.) Bruxelles. 4to.—*From the same.*
- Bulletin de la Société Impériale des Naturalistes de Moscou: Année 1844. Tome XVII. No. 4; et Année 1845. Tome XVIII. No. 1. Moscow, 1844-5. 8vo.—*From the Imperial Society of Naturalists of Moscow.*
- Philosophical Transactions of the Royal Society of London, for the year 1848. Parts 1 and 2; and Part 1, for 1849. London. 4to.—*From the Society.*
- List of the Council, Scientific Committees, and Fellows of the Royal Society of London, Nov. 30, 1847; and Nov. 30, 1848. London. 4to.—*From the same.*
- Proceedings of the Royal Society of London. Nos. 69, 70, 71 & 72, from Nov. 30, 1847, to Feb. 22, 1849. London. 8vo.—*From the same.*
- Address of the Most Noble, the Marquis of Northampton, the President: Read at the General Meeting of the Royal Society, on Tuesday, June 9, 1848. 8vo.—*From the same.*
- Observations made at the Magnetical and Meteorological Observatory

- at Bombay, April—December, 1845, and printed by the Honourable East India Company, under the superintendence of Arthur Bradford Orlebar, A.M. Professor of Astronomy and Mathematics, Lincoln College, Oxford. Bombay, 1846. 4to.—*From the same.*
- Meteorological Observations, Madras, 1841 to 1845, inclusive. Madras. 4to.—*From the same.*
- Astronomical Observations made at the Royal Observatory, Edinburgh, by the late Thomas Henderson, F.R.S.L. & E., &c. Reduced and edited by his successor, Charles Piazzi Smyth, F.R.S. E., &c. Vol. VIII. for 1842. Edinburgh, 1849. 4to.—*From the Observatory.*
- Barometrographia: Twenty years' variation of the Barometer in the climate of Britain, exhibited in autographic curves, with the attendant winds and weather; and copious notes illustrative of the subject. By Luke Howard, Esq. F.R.S. London, 1847. Folio. *From the Author.*
- On the Barometrical Variation as affected by the Moon's declination. By Luke Howard, Esq. F.R.S. (From the Philosophical Transactions; Part 4 for 1846.) London, 1846. 4to.—*From the same.*
- Elements of Electro-Biology, or the Voltaic Mechanism of Man;—of Electro-Pathology, especially of the Nervous System;—and of Electro-Therapeutics. By Alfred Smee, F.R.S., &c. &c. London, 1849. 8vo.—*From the Author.*
- Directions for the use of a small Apparatus to be employed with a Ship's Standard Compass, for the purpose of ascertaining, at any time, whether at Sea or in Harbour, the *changing* part of the deviation in the point of the Compass, occasioned by the Ship's Iron; or that part of the deviation which is usually different in different parts of the Globe. By Lieut. Col. Sabine, R.A. London, 1849. 8vo.—*From the Author.*
- Results of Observations made at the Magnetical Observatory of Dublin, during the years 1840–43. First Series. Magnetic Declination. By the Rev. Humphrey Lloyd, D.D., President of the Royal Irish Academy, F.R.S., &c. &c. (From the Transactions of the Royal Irish Academy; Vol. XXII. Part 1.) Dublin, 1849. 4to.—*From the Author.*
- On the Mean Results of Observations. By the Rev. Humphrey Lloyd, D.D., President R. I. A., F.R.S., &c. &c. (Transactions of R. I. A. Vol. XXII. Part 1.) Dublin, 1849. 4to.—*From the same.*

- An Account of a Method of determining the total Intensity of the Earth's Magnetic Force, in absolute measure. By the same. (Proceedings of Royal Irish Academy, January 24, 1848.) 8vo. *From the same.*
- On the Corrections required in the Measurement of the Magnetic Declination. By the same. (Proceedings of R. I. A.) 8vo.—*From the same.*
- Annals and Magazine of Natural History, including Zoology, Botany, and Geology. Second Series. Vol. IV. No. 22. October, 1849. London. 8vo.—*From Sir William Jardine, Baronet.*
- Flora Batava, of Afbeelding en Beschrijving van Nederlandsche Gewassen: door Jan Kops, Hoogleeraar te Utrecht, &c. &c. en J. E. Van der Trappen, Med. Doct. Nos. 152 to 158, inclusive; with Title Page and Index to Vol. X. Amsterdam, 1849. 4to. *From H. M. the King of the Netherlands.*
- Contributions to Conchology. Nos. 1, 2, 3, 4, (8vo.); and Monograph of Stoaostoma, a new Genus of Operculated Land Shells. (4to.). By C. B. Adams, A.M. Professor of Zoology, &c. in Amherst College, Mass. Amherst, 1849.—*From the Author.*
- On Entophyta in Living Animals: New Species of Entozoa: and on Glandulæ Odoriferæ. By Joseph Leidy, M.D. (Extracted from the Proceedings of the Academy of Natural Sciences of Philadelphia, October, 1849.) 8vo.—*From the Author.*
- Selections from the Correspondence of the Executive of New Jersey, from 1776 to 1786. Published by order of the Legislature. Newark, N. J. 1848. 8vo.—*From the New Jersey Historical Society.*
- The Plough, the Loom, and the Anvil: J. S. Skinner, Editor. Vol. I. July, 1848, to July, 1849; and Vol. II. Nos. 1 to 6, July to December, 1849. Philadelphia. 8vo.—*From the Editor.*
- The African Repository and Colonial Journal. Vol. XXV. No. 12. December, 1849. Washington. 8vo.—*From the American Colonization Society.*
- Transactions of the Royal Society of Edinburgh. Vol. XVI. Part 5, for the Sessions 1848, 1849: and Vol. XIX. Part 1, containing the Makerstoun Magnetical and Meteorological Observations for 1845 and 1846. Edinburgh, 1849. 4to.—*From the Royal Society of Edinburgh.*
- Proceedings of the Royal Society of Edinburgh. Vol. II. Nos. 32, 33, 34. Edinburgh, 1848–9. 8vo.—*From the same.*

On motion of Mr. Ord, Dr. C. W. Short was appointed to prepare a necrological notice of the late Wm. Short.

Mr. Thomas Gilpin made some remarks upon the alleged influence of the moon upon the weather.

He did not mean to differ from Doctor Herschell as to the want of lunar influence upon the weather, but he thought if there was any, it was attributable to the change of her declination, and not to the effect of light, or to the change of her phases, however various and ostensible.

The condition of our atmosphere and seasons is effected by solar influence and the change of the sun's declination from the summer to the winter solstice, which being 47 degrees, takes a period of 183 days.

The influence of the moon on the land of the globe is scarcely acknowledged; but on the water of the globe it is far more powerful than that of the sun, and the change of declination of the moon is 10 degrees more than that of the sun, say 57 degrees, all of which is accomplished by her moving through one-half of one lunation, or in the short time of 14 days.

During the winter months, the new moon is always with the sun at its greatest southern declination at the tropic of capricorn, and her latitude, or declination, is about 28 degrees; but she has to pass in 14 days to be a full moon in the tropic of cancer, at a latitude or declination of 28 degrees north; in all about 57 degrees.

Near the equator, or the middle of this ascending path, she passes at the rapid rate of 7 to 8 degrees of declination per day, and the reverse of this in her descending path, from north to south, at the last half of her lunation with corresponding but contrary positions, during the summer circuit.

If the moon were to have any influence over our atmosphere in this rapid and mighty range, it would be to draw alternately a south atmosphere to the north, and a north atmosphere to the south, to moderate the cold of the winters, and the heat of the summers alternately in both hemispheres. But what effect the moon has upon the aerial volume in this respect has not yet been attended to.

These remarks are induced by the presentation of Mr. Luke Howard's papers to night, in which his observations show that the declination of the moon from north to south produces an effect on the barometer, which he has recorded in two positions in England, daily, during twenty years; the laborious and elegant tables of which,

now before us, include all these lunar variations during more than the Metonic period of 6940 days.

Mr. Luke Howard says in his summary—"It is to be inferred from these, that the barometrical mean is depressed by the moon's position in south declination—the depression is gradual—but upon the planet quitting her south position to return north, an elevation indicates a return of the pressure to its former position."

Prof. Frazer described an attempt which had been made by Prof. J. C. Cresson and himself, to repeat Biot's celebrated experiments upon the transmission of sound through iron pipes.

The pipe upon which they experimented was a gas main just laid in South street, from Broad to Ashton, and up Ashton, from South to Lombard. It was 4300 feet long and 8 inches in diameter, and had one turn, at right angles, at the corner of South and Ashton. This turn was made by a piece of pipe with four branches—two of which (the south and west) were plugged—the other two making the communication.

As the pipe was laid in the ground, with a mass of moist earth lying upon it, it was, perhaps, not to be expected that the vibrations excited in the iron would be propagated to any great distance, but the experimenters found, to their surprise, that even the heavy blows of the sledge upon the inner part of the pipe were not communicated through the air. They had provided themselves with hammers and bells for the purpose of making the signals, but in consequence of the very strong language used by M. Biot in describing his experiments, they had not taken the precaution to provide pistols for explosions. It appears, that in the French experiments there were two bends in the pipe, but at what angle is not mentioned in any account which we have been able to obtain, (as it appears that the *Memoires de la Société d'Arceuil*, in which the original account of the experiments is contained, is not in any library in this city).

As it was necessary to connect the pipe under experiment with the other mains without delay, it was not possible to pursue the experiments any farther, but Profs. C. and F. hope to have, during the approaching summer, an opportunity of repeating them upon another pipe, and under more favourable circumstances, so as to detect, if possible, the cause of their present failure.

The annual report of the Publication Committee was presented by Mr. Lea.

The annual report of the Committee on Finance was presented by Mr. Lea.

The annual appropriations recommended by the Committee, were adopted.

Pending nomination, No. 232, was read.

*Stated Meeting, January 4.*

Present, eleven members.

Dr. FRANKLIN BACHE, Vice-President, in the Chair.

The judges and clerks of the election held this day, reported the appointment of the following officers:—

*President.*

Robert M. Patterson, M.D.

*Vice-Presidents.*

Franklin Bache, M.D.

Alexander Dallas Bache, LL.D.

Hon. John K. Kane.

*Secretaries.*

Robley Dunglison, M.D.

Prof. John F. Frazer,

Charles B. Trego,

Prof. E. Otis Kendall.

*Members of the Council for Three Years.*

Robert Hare, M.D.

William Hembel,

Charles D. Meigs, M. D.

Henry Vethake,

George M. Justice,

For one year, in place of Mr. W. Short, deceased.

*Curators.*

Franklin Peale,

John Price Wetherill,

John C. Cresson.

*Treasurer.*

Benjamin W. Richards.